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I.—*Note on the Indian Butterflies comprised in the subgenus Pademna of the genus Euplœa*:—By LIONEL DE NICEVILLE, F. E. S., C. M. Z. S.

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In the August Proceedings of the Society, p. 158 will be found a note on the subgenus *Stictoplœa*, mainly based on material received from the Rev. Walter A. Hamilton and collected in the Khasi Hills. The present note owes its origin to the same source, over 200 specimens of *Pademna* having been sent to me from that region by Mr. Hamilton. The subgenus *Pademna* occurs in Ceylon, South India, Bengal as far west as Maldah, the lower slopes of the Sikkim hills, Bhutan, Assam, Burma, the Malay Peninsula, Siam, Cochin China, Nias Island, and Hainan. Its headquarters appears to be Assam and Burma (especially the former), where it may be said to swarm; everywhere else it is comparatively rare, except perhaps in Calcutta, where *E. kollari*, Felder, may be met with in considerable numbers if looked for in the right places and at the right seasons of the year.

The subgenus as represented in Ceylon, South India, Orissa, Bengal (usually), and in parts of Burma and in the Malay Peninsula, presents the curious phenomenon that the several species are in both sexes entirely, or but slightly, on the upperside of the wings, more especially

the forewing, un glossed with blue; but in some parts of Bengal (Maldah), and in Sikkim, specimens are met with which are either entirely un glossed, or partly glossed with blue, towards the base of the wing, while in Assam, Arakan and Pegu the whole of the forewing is usually most richly blue-glossed. This phenomenon may be due to mimicry, as in the Khasi Hills of Assam, where *Pademmas* are individually most numerous, *Euploea midamus*, Linnæus (*linnæi*, Moore), is also exceedingly common, and the *Pademmas* probably mimic it or some other blue-glossed species. The only thing to be said against this theory is that in Maldah where many specimens are most distinctly glossed with blue there are no other blue *Euploëas* which these *Pademmas* could mimic; the occurrence of these latter in Maldah may, however, be due to immigration.

The next point to be dealt with is the extraordinary variability of the subgenus. The species which is found in Ceylon (*E. sinhalæ*, Moore) appears to be quite constant, as do specimens of *E. kollari*, Felder, received from South India, the Eastern and Western Ghâts, Orissa, and Calcutta. But directly the hills are approached, at Maldah north of the Ganges and at the foot of the Sikkim hills, the species commences to vary and to approach *E. klugii*, Moore, both as regards the presence of a more or less well-marked blue gloss, and in the acquisition of discal markings to the forewing. But for these intermediate specimens, *E. kollari* might be considered to be a good and constant species, but, as it is, in certain parts of north-eastern India it is distinctly variable. As we proceed to the eastwards, in Bhutan, Assam, and the northern and middle divisions of Burma (Arakan and Pegu), blue-glossed species mainly prevail, though occasionally specimens almost as free from the gloss as is *E. kollari* are met with. Lastly, in the southernmost division of Burma (Tenasserim) the blue-glossed species have almost disappeared, being as rare as un glossed are in Assam, and are replaced by un glossed species which differ in the character of the markings from the continental Indian species, *E. kollari*. In the Malay Peninsula *Pademmas* are very rare, and are of the Tenasserim form. To a certain extent, therefore, we can divide up the Indian *Pademmas* into more or less well-defined geographical races, which, were they only constant each in its own region, might be retained as distinct species. But this is not entirely so. *E. kollari* gradually merges into *E. klugii* in Maldah and the lower slopes of the Sikkim Hills, and *E. klugii* equally gradually grades into *E. erichsonii*, Felder, in Arakan. In their respective headquarters the two extreme forms are perfectly constant and recognisable at a glance, *E. kollari* from any part of India south of the Ganges, and *E. erichsonii* from Lower Tenasserim or the Malay Peninsula. On the border-lands between these regions the several species are no longer

reliably distinct, and in the Khasi Hills, which may be said to be the head-quarters of the *Pademmas*, as there they exist in the greatest number of individuals, a bewildering multiplicity of various forms is met with. Messrs. Butler and Moore, but especially the latter, have described a great number of these quite inconstant forms as distinct species, and the present writer with the material at his disposal, could if desired, easily describe a dozen more such species, many of them far more distinct in superficial appearance than several of Messrs. Moore and Butler's. It appears to him that the only way to deal satisfactorily with these puzzling species is to treat all of them (except *E. sinhala* which appears to be constant owing to its insular habitat) as geographical races of the earliest described *E. klugii*. To this end he has given below the full synonymy of the various forms and a brief description of them.

I must once more enter my protest against the erroneous views held by home naturalists on the variability of these species. Messrs. Wood-Mason, Marshall, Distant, Elwes, Adamson, Doherty, Watson, and I, all of whom know these insects in life and have lived amongst them, have written page upon page to shew how inconstant they are, yet Mr. Moore, who has never been in the East, in his latest work on butterflies ("Lepidoptera Indica"), admits eight distinct species, and eight named "Varieties" of *Pademina*, all but one of the latter of which he described as good and distinct species in 1883. When a species is obviously so extremely variable as *E. klugii*, it can be of no possible scientific use to have names for every possible combination and permutation of the blue-glossing of the upperside and of the disposition of the markings of both sides of the wings. These variations are obviously mainly individual, and from the same batch of eggs it is almost certain that several at least of these variations would be obtained were they carefully bred. It is, however, of great scientific use to make out the range and to describe the peculiarities of geographical races when these are constant and sufficiently well-marked for definition each in its own area, but this Mr. Moore never makes the slightest attempt to do. It is hoped that what has been here written will tend to this desirable result.

I might also mention to shew the absurdity of the views expressed by Mr. Moore in his Monograph of *Euploëina* written in 1883, in which seventeen distinct species of *Pademina* are given from India,—that I sent to him, just after the appearance of that paper, 12 very variable specimens of *Pademina* captured in the Arakan Hills, out of which he could only name three. The inference was that the other nine specimens represented as many "new species."

1. *EUPLOEA (PADEMMA) SINHALA*, Moore.

Euplœa sinhala, Moore, Ann. and Mag. of Nat. Hist., fourth series, vol. xx, p. 45 (1877); id. (part), Marshall and de Nicéville, Butt. of India, vol. i, p. 66, n. 47 (1882); *Isamia sinhala*, Moore, Lep. Cey., vol. i, p. 10, pl. v, fig. 1, male (1880); *Pademmma sinhala*, Moore, Proc. Zool. Soc. Lond., 1883, p. 309, n. 18; idem, id., Lep. Ind., vol. i, p. 126, pl. xlvii, figs. 3, male; 3a, female (1890).

HABITAT: Ceylon.

EXPANSE: ♂, ♀, 3·25 to 3·85 inches.

DESCRIPTION: MALE. UPPERSIDE, both wings dark olive-brown. Forewing with the outer marginal area broadly much paler than the rest of the wing, bearing in the middle of the pale area a series of from six to eight small ochreous-white spots, the one in the first median interspace the largest, often two in the submedian interspace; a marginal series of dots variable in number, but usually four, commencing at the anal angle and never reaching the apex of the wing; the usual oval sexual brand in the submedian interspace. Hindwing with the outer margin paler than the rest of the wing, but less markedly so than in the forewing; the usual flour-like sexual patch about the anterior area of the discoidal cell; a submarginal series of twelve ochreous-white spots, the four anterior ones round, decreasing in size towards the costa, placed one in each interspace, the posterior ones elongated into streaks, placed two in each interspace; an almost complete marginal series of dots much larger than those in the forewing, not quite reaching the apex of the wing, placed in pairs in the interspaces. UNDERSIDE, both wings paler olive-brown than on the upper-side. Forewing somewhat darker in the middle of the disc; a costal spot placed between the bases of the first and second subcostal nervules; discal spots placed beyond the cell varying from two to four, the lowermost spot in the submedian interspace the largest, all these spots bluish-white; submarginal and marginal series of spots as on the upper-side, but the latter more numerous; inner margin of the wing up to the first median nervule cinereous; the sexual brand black and prominent. Hindwing with none, one, or two discal spots placed just beyond the cell; submarginal and marginal spots as on the upper-side. FEMALE, rather paler than the male throughout, lacking all the secondary sexual characters, and having the inner margin of the forewing straight, not strongly outwardly bowed. UNDERSIDE, forewing has the inner margin cinereous as far as the submedian fold.

E. sinhala occurs only in Ceylon, and is, for an *Euplœa* of this group, owing to its insular position, fairly constant.

2. *EUPLOEA (PADEMMA) KLUGII*, Moore.

Euplœa klugii, Moore, Horsfield and Moore, Cat. Lep. Mus. E. I. C., vol. i, p. 130,

n. 258 (1857); idem, id., Anderson, Anat. and Zool. Rescarchos, p. 922 (1878); id., Marshall and de Nicéville, Butt. of Ind., vol. i, p. 64, n. 44 (1882); id., Adamson, Notes on the *Danaïnae* of Burmah, p. 8 (1889); idem, id., Cat. of Butt. coll. in Burmah, p. 4, n. 20 (1889); id., Watson, Journ. Bomb. Nat. Hist. Soc., vol. vi, p. 29, n. 8 (1891); *Salpinx klugii*, Butler, Journ. Linn. Soc. Lond., Zoology, vol. xiv, p. 294, n. 35 (1878); *E. (Pademna) klugii*, Wood-Mason and de Nicéville, Journ. A. S. B., vol. lv, pt. 2, p. 316, n. 10 (1886); *Pademna klugii*, Moore, Lep. Ind., vol. i, p. 117, pl. xlii, figs. 1, male; 1a, female; 1b, female (type of *E. grantii*) (1890); *Pademna klugi*, Moore, Proc. Zool. Soc. Lond., 1883, p. 305, n. 1, pl. xxxii, fig. 1, male; *Euploea (Pademna) klugi*, Elwes, Trans. Ent. Soc. Lond., 1888, p. 300, n. 9; *Euploea erichsonii*, Felder, Reise Novara, Lep., vol. ii, p. 324, n. 444 (1865); id., Marshall and de Nicéville, Butt. of India, vol. i, p. 63, n. 42 (1882); id., Watson, Journ. Bomb. Nat. Hist. Soc., vol. iii, p. 18, n. 13 (1888); id., Adamson, Cat. of Butt. coll. in Burmah, p. 4, n. 18 (1889); id., Watson, Journ. Bomb. Nat. Hist. Soc., vol. vi, p. 29, n. 7 (1891); id., Shopland, Butt. coll. in Aracan, p. 4; *Euploea (Pademna) erichsonii*, Wood-Mason and de Nicéville, Journ. A. S. B., vol. lv, pt. 2, p. 347, n. 11 (1886); id., Elwes and de Nicéville, Journ. A. S. B., vol. lv, pt. 2, p. 415, n. 7 (1886); *Salpinx erichsonii*, Butler, Journ. Linn. Soc. Lond., Zoology, vol. xiv, p. 295, n. 39 (1878); *Pademna erichsonii*, Moore, Journ. Linn. Soc. Lond., Zoology, vol. xxi, p. 31 (1886); *Pademna erichsoni*, Moore, Proc. Zool. Soc. Lond., 1883, p. 307, n. 11; *Euploea erichsoni*, Adamson, Notes on *Danaïnae* of Burmah, p. 7 (1889); *Euploea kollari*, Felder, Reise Novara, Lep., vol. ii, p. 325, n. 445 (1865); *Pademna kollari*, Moore, Proc. Zool. Soc. Lond., 1883, p. 309, n. 19, pl. xxix, fig. 9, male; id., Swinhoe, Proc. Zool. Soc. Lond., 1885, p. 126, n. 8; id., Hampson, Journ. A. S. B., vol. lvii, pt. 2, p. 348, n. 8; id., Moore, Lep. Ind., vol. i, p. 124, pl. xlvii, figs. 2, male; 2a, female (1890); *E. (Pademna) kollari*, de Nicéville, Journ. A. S. B., vol. liv, pt. 2, p. 41, n. 8 (1885); id., Taylor, List of the Butt. of Khorda in Orissa, p. 1, n. 8 (1888); id., Elwes, Trans. Ent. Soc. Lond., 1888, p. 301, n. 10; id., Ferguson, Journ. Bomb. Nat. Hist. Soc., vol. vi, p. 435, n. 9 (1891); *Euploea crassa*, Butler, Proc. Zool. Soc. Lond., 1866, p. 278, n. 31; id., Distant, Rhop. Malay., p. 29, n. 9, pl. v, fig. 8, male (1882); p. 410, n. 9 (1886); id., Marshall and de Nicéville, Butt. of India, vol. i, p. 63, n. 41 (1882); id., Watson, Journ. Bomb. Nat. Hist. Soc., vol. iii, p. 18, n. 12 (1888); id., Adamson, Cat. of Butt. coll. in Burmah, p. 4, n. 17 (1889); idem, id., Notes on *Danaïnae* of Burmah, p. 7 (1889); id., Shopland, Butt. coll. in Aracan, p. 4; *Salpinx crassa*, Butler, Journ. Linn. Soc. Lond., Zoology, vol. xiv, p. 295, n. 38 (1878); id., Moore, Proc. Zool. Soc. Lond., 1878, p. 822; *Pademna crassa*, Moore, Proc. Zool. Soc. Lond., 1883, p. 307, n. 9; idem, id., Lep. Ind., vol. i, p. 121, pl. xlv, figs. 2, male; 2a, female (1890); *Salpinx illustris*, Butler, Journ. Linn. Soc. Lond., Zoology, vol. xiv, p. 294, n. 36 (1878); *Euploea illustris*, Marshall and de Nicéville, Butt. of India, vol. i, p. 63, n. 46 (1882); id., Shopland, Butt. coll. in Aracan, p. 4; *Pademna illustris*, Moore, Proc. Zool. Soc. Lond., 1883, p. 307, n. 7; idem, id., Lep. Ind., vol. i, p. 119, pl. xliii, figs. 1, male; 1a, female (1890); *Salpinx masoni*, Moore, Proc. Zool. Soc. Lond., 1878, p. 823; *Euploea masoni*, Marshall and de Nicéville, Butt. of India, vol. i, p. 64, n. 43 (1882); id., Adamson, Cat. of Butt. coll. in Burmah, p. 4, n. 19 (1889); id., Notes on *Danaïnae* of Burmah, p. 7 (1889); *Pademna masoni*, Moore, Proc. Zool. Soc. Lond., 1883, p. 309, n. 17; idem, id., Lep. Ind., vol. i, p. 123, pl. xlvi, fig. 1, male (1890); *Salpinx grantii*, Butler, Trans. Ent. Soc. Lond., 1879, p. 2; *Euploea grantii*, Marshall and de Nicéville, Butt. of India, vol. i, p. 65, n. 45 (1882); id., Adamson, Cat. of Butt. coll. in Burmah, p. 4 (1889); id., Shopland, Butt. coll. in Aracan, p. 4; *Pademna granti*, Moore,

Proc. Zool. Soc. Lond., 1883, p. 306, n. 2; *Isamiã rothneyi*, Moore, Ent. Month. Mag., vol. xix, p. 34 (1882); *Euplœa sinhala* (part, nec Moore), Marshall and de Nicéville, Butt. of India, vol. i, p. 66, n. 47, pl. vii, fig. 12, *male* and *female* (1882); *Pademna dharmã*, Moore, Proc. Zool. Soc. Lond., 1883, p. 306, n. 3, pl. xxxii, fig. 2, *female*; *Pademna augusta*, Moore, Proc. Zool. Soc. Lond., 1883, p. 306, n. 4; idem, id., Lep. Ind., vol. i, p. 118, pl. xlii, figs. 2, *male*; 2a, *female* (1890); *Pademna indigofera*, Moore, Proc. Zool. Soc. Lond., 1883, p. 306, n. 5, pl. xxxii, fig. 3, *male*; idem, id., Lep. Ind., vol. i, p. 120, pl. xlv, fig. 3, *male* (1890); *Pademna imperialis*, Moore, Proc. Zool. Soc. Lond., 1883, p. 307, n. 6; idem, id., Lep. Ind., vol. i, p. 119, pl. xliii, figs. 2, *male*; 2a, *female* (1890); *Pademna regalis*, Moore, Proc. Zool. Soc. Lond., 1883, p. 307, n. 8; idem, id., Lep. Ind., vol. i, p. 119, pl. xlv, figs. 1, *male*; 1a, *female* (1890); *Pademna pembertoni*, Moore, Proc. Zool. Soc. Lond., 1883, p. 308, n. 12, pl. xxxii, fig. 6, *male*; idem, id., Lep. Ind., vol. i, p. 124, pl. xlvi, figs. 3, *male*; 3a, *female* (1890); *Pademna maccllellandi*, Moore, Proc. Zool. Soc. Lond., 1883, p. 308, n. 13, pl. xxxii, fig. 4, *female*; idem, id., Lep. Ind., vol. i, p. 120, pl. xlv, figs. 2, *male*; 2a, *female* (1890); *Pademna uniformis*, Moore, Proc. Zool. Soc. Lond., 1883, p. 308, n. 14; idem, id., Lep. Ind., vol. i, p. 124, pl. xlvi, fig. 1, *male* (1890); *Pademna apicalis*, Moore, Proc. Zool. Soc. Lond., 1883, p. 308, n. 15; idem, id., Lep. Ind., vol. i, p. 123, pl. xlvi, figs. 2, *male*; 2a, *female* (1890); *Euplœa apicalis*, Shopland, Butt. coll. in Aracan, p. 4; *Pademna burmeisteri*, Moore, Proc. Zool. Soc. Lond., 1883, p. 309, n. 16; idem, id., Lep. Ind., vol. i, p. 123, pl. xlv, figs. 3, *male*; 3a, *female* (1890); *Pademna sherwillii*, Moore, Lep. Ind., vol. i, p. 120, pl. xlv, fig. 1, *male* (1890).

Geographical race *E. kollari*, Felder.

HABITAT: South India, Orissa, Bengal, lower slopes of the Sikkim Hills.

EXPANSE: ♂, 3·3 to 4·1; ♀, 3·7 to 4·1 inches.

DESCRIPTION: MALE and FEMALE. Differs only from *E. sinhala*, Moore, in the marginal spots of the forewing on both sides being rather larger and reaching the apex of the wing usually; the submarginal series also rather larger. In all other respects as in *E. sinhala*.

It is rather stretching a point to admit *E. kollari* as distinct from *E. sinhala*, but as the differences noted above appear to be constant and are just recognisable, I have thought it best to separate them.

Except in Bengal, where *E. kollari* is found in the Sikkim terai and on the lower outer slopes of the Sikkim hills and in Maldah, it appears to be confined to the littoral, the furthest point from the coast where I have any record of its occurrence being Poona, about 70 miles in a straight line from the sea, and Bhadrachalam, on the Godavari, Madras, which is about 100. Neither is it found in the hills except at the lower elevations up to about 2,000 feet, save in the Nilgiris, where Mr. Hampson took it at 3,500 feet elevation. In South India, Orissa and Bengal (with some exceptions) the species is quite constant, it is only at Bholahât in the Maldah district and on the lower slopes of the Sikkim hills and in

the Sikkim terai that the species begins to vary, acquiring a more or less well-marked blue gloss on the upperside of the wings, and some discal spots on the forewing, which leads us to the typical form of the species.

Typical form *E. klugii*, Moore.

HABITAT: Maldah, lower slopes of the Sikkim Hills, Bhutan, Assam, Arakan, Pegu.

EXPANSE: ♂, 3·5 to 4·0; ♀, 3·0 to 4·2 inches.

DESCRIPTION: MALE. UPSERSIDE. [Of all the species of *Euplœa* known to me this is the most variable. Following the order of the *Pademmma* group here adopted, the varieties which most nearly resemble *E. kollari* are first described, while the true *E. klugii*, which is the most divergent form in one direction, is next described, and lastly those variations are described which lead up to the geographical race *E. erichsonii*, Felder, which ends the series.] A specimen from Sikkim in my collection agrees absolutely with typical *E. sinhala*, Moore, from Ceylon, except that the base of the forewing on the upperside in some lights is slightly blue-glossed; other Sikkim specimens I possess have the submarginal and marginal spots to both wings rather smaller than in typical *E. kollari*, while others again are normal in this respect, both the latter forms being slightly blue-glossed. In the next gradation the dark basal area of the forewing on the upperside is less well marked, and extends more towards the outer margin, while the first discal spots divided by the lower discoidal nervule have appeared; these varieties occurring in Sikkim, Assam, and Arakan, but always sparingly. In the next group, which includes the typical *E. klugii*, it is quite impossible to describe within reasonable limits all the variations which occur. The dark basal area now gradually disappears altogether, the blue-glossing becomes more and more intense till it reaches its maximum, the spots of the wings are infinitely variable—in some there are the two marginal series only, in some one or both these series are obsolete on the hindwing, in some the marginal series is confined in the forewing to a few at the anal angle, or are absent altogether, while the submarginal series are sometimes reduced from the full number of nine to four mere dots towards the apex; the discal spots vary from a complete series of four to none at all; while in some specimens there is a large spot at the end of the discoidal cell, in others a small spot, and in others again no spot at all; the colour of the spots also varies, some are pure white, others strongly glossed with blue; there is sometimes a costal spot at the base of the first and second subcostal nervules, this being frequently absent. On the hindwing some specimens are richly blue-glossed on the disc, while

others are not glossed at all; some are rich chestnut-coloured towards the abdominal margin, this colour also being found in some examples on the bowed-out inner margin of the forewing. **UNDERSIDE.** The variations of the spots on both wings described above as found on the upper-side of the wings are also found on the underside, though to a less extent. **FEMALE** varies in precisely the same way as does the male. The variations noted above are found throughout the range of the typical form, but they reach their maximum development in the Khasi Hills, where I have been able to accurately match the following species figured in Moore's "Lepidoptera Indica"—*E. klugii*, *E. augusta*, *E. illustris*, *E. imperialis*, *E. regalis*, *E. maclellandi*, *E. indigofera*, *E. sherwillii*, and *E. uniformis*.

Geographical race *E. erichsonii*, Felder.

HABITAT: [Maldah, one female; Caehar, one female], Arakan, Pegu, Tenasserim, Malay Peninsula, Siam, Cochin China.

EXPANSE: ♂, 3.2 to 4.0; ♀, 3.7 to 4.1 inches.

DESCRIPTION: MALE. UPPERSIDE. [Still continuing the same order of the *Pademmma* group, I first take up the description of the varieties most nearly approaching the last geographical race.] The connecting link between the *E. klugii* race and the one now under consideration is *E. masoni*, Moore, which has the basal area of the forewing on the upper-side glossed with bright violet-blue, which character typically connects this race with *E. kollari*, Felder, from which, however, it may be distinguished by the submarginal series of spots gradually increasing in size from the anal angle till the one in the subcostal interspace is reached, then again rapidly decreasing to the costa. But for this single character it would, I think, be quite impossible to separate some forms of *E. erichsonii* from *E. kollari*. This geographical race is not as variable as the last, though it is still very variable, Mr. Moore placing in it *E. crassa* (= *E. erichsonii*), *E. burmeisteri*, *E. masoni*, *E. apicalis*, and *E. pembertonii*. The spots on both wings are almost as variable as in *E. klugii*, except that the discal spots of the forewing never exceed two in number and are usually absent altogether, and I have seen no specimen with a spot in the discoidal cell. **FEMALE**, markings throughout similar to those of the male.

The two female specimens, one each from Maldah and Caehar, mentioned under habitat above, quite upset the otherwise fairly well-defined geographical distribution of this local race. These two specimens both possess the submarginal series of spots on the forewing of the typical shape of *E. erichsonii*, so I am reluctantly obliged to include them under that race. I have other aberrant male specimens from Arakan which I

have placed under *E. klugii*, as they are very richly blue-glossed at the base of the forewing, and have a large spot in the discoidal cell, but the submarginal spots are typically those of *E. erichsonii*, so these specimens have two characters of *E. klugii* and one of *E. erichsonii*. The two races over-lap in Arakan and Pegu, and many specimens from thence are almost intermediate between the two local races, so that the placing them in one or the other is purely arbitrary.

I have taken great pains to try and define the three geographical races of *E. klugii* which at most can be admitted, but now that I have finished the task, I am almost of opinion that it would have been more philosophical and scientific to have dealt with the very large series of specimens I possess as one species in the way in which I treated *E. (Stictoplœa) harrisii*, Felder. There is no doubt, however, that *E. kollari* is constant in certain localities, as also is *E. erichsonii* in other localities, these being the two extremes of the series, just in the same way that *E. harrisii* and *E. hopei* are as distinct in their respective head-quarters, it is only when one comes to consider the intermediate forms which occur in a region geographically intermediate between the two extreme forms, that it is found that the constancy of all the forms immediately breaks down. To deal with species like these it is imperatively necessary to have very extensive series of specimens from all the localities in which they occur, and also to act up to the spirit of the theory of evolution which nearly all naturalists profess to believe in, but some naturalists entirely ignore in their writings when describing different species of animals. If my individual opinions and conclusions be not accepted, I beg that reference be made to the writings of the competent field-naturalists who have studied these butterflies in life. It is needless here to recapitulate what they have recorded: reference to these papers is in all cases given in the synonymy of *E. klugii*.

There is still another point I may mention. Perhaps of all the oriental butterflies, *Euplœas* are, where they occur at all, amongst the most commonly met with, conspicuous, and most easily captured of insects. They are so obviously protected that they float about in the air in the quietest manner and seem to court attention, and moreover are always, or nearly so, the commonest of butterflies. So well has the Indian region been explored that I should almost as soon expect to find a new "Cabbage-White" in a London square as a new *Euplœa* in any part of India; and it is to be hoped that no more "new species" will be described from India unless they are obviously quite different from any hitherto known species. Doubtless from unexplored regions and islands many new species yet remain to be described, but certainly there are none from India.